



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,482	07/24/2003	Jon O. Reynolds	ITW7510.052	1481
33647	7590	07/25/2006	EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (ITW)			SHAW, CLIFFORD C	
14135 NORTH CEDARBURG ROAD				
MEQUON, WI 53097			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary**Application No.**

10/604,482

Applicant(s)

REYNOLDS ET AL.

Examiner

Clifford C. Shaw

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 and 04 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1.) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.) Claim 50 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 50, line 8, it is not clear what is meant by “an energize secondary voltage command”, making it unclear what structural limitations are associated with the claimed “controller”.

3.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4.) Claims 26-28, 30-47, 49, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp (4,531,045) taken with Gatfield (3,992,565). The patent to Kemp (4,531,045) discloses a system and method with features claimed, including: power source 10 having a controller necessarily associated with the contactor of element “K1”; electrode holder at 40; trigger associated with the actuator of switch 70; transmitter associated with the switch contacts of 70, transmitting a solitary rectangular pulse as shown in the top graph, “gun switch”,

Art Unit: 1725

of figure 3; and a pulse receiver associated with elements UI – (1-4) in figure 2. The claims differ from Kemp (4,531,045) in calling for: pulse transmission through a weld cable; in calling for particular pulse widths in claims 31, 42 and 47; and in calling for a kit in claim 50. These differences do not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious that the weld cable 45 in Kemp (4,531,045) include the control wires connected to the switch assembly 70 in view of the teachings of Gatfield (3,992,565) that it is useful to include control wires in a welding cable (see elements 18 and 33 in figure 1 and the discussion at column 2, lines 53-60 in the patent to Gatfield (3,992,565)). In regard to the claimed pulse widths, it is considered obvious that the pulse width shown in figure 3 in Kemp (4,531,045) for the "gun switch" could assume any value that could reasonably be attained by a human operator pressing the switch, including a width on the order of three-quarters of a second (750 milliseconds), satisfying the claims. In regard to the "kit" of claim 50, it is considered obvious that the components in the system of Kemp (4,531,045) where at some point discrete components prior to assembly, thereby constituting a kit with the features claimed.

5.) Claims 29 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp (4,531,045) taken with Gatfield (3,992,565) as applied to claims 26-28 and 30-50 above, and further in view of Davis et al. (4,561,059). The only aspects of the claims to which the rejection above does not apply are: the provision in claim 29 for a power source with constant current and constant voltage modes; and the provision in claim 48 for voltage feedback. These differences do not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used the system of Kemp (4,531,045) in conjunction

Art Unit: 1725

with any well known arc welding power source. In particular, it would have been obvious to have used the system of Kemp (4,531,045) with a power source having constant current and constant voltage modes, and having voltage feedback, the motivation being the teachings of Davis et al. (4,561,059) that such is useful in an arc welding power supply (see figure 1 and the discussion in columns 6 and 7 of Davis et al. (4,561,059)).

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Patrick J. Ryan, can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw
Primary Examiner
Art Unit 1725

July 21, 2006